

W6IFE San Bernardino Microwave Society Newsletter

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The 6 **November 1997** meeting tech talk will be Bill, WA6QYR on listening to Apollo signals. SBMS meets at the American Legion Hall 1024 Main Street (south of the 91 freeway) in Corona, CA at 1930 hours local time.

Last meeting- Dick K6HIJ talked about noise. Noise is a good calibration source. Dick's charts show galactic noise and man made noise vs. frequency. Knowing what your system noise temperature is will let you know how well your system will perform. As Dick pointed out making a very low noise 2 mtr preamp doesn't make sense when the noise environment is so much higher. But up at 10 Ghz where manmade noise is low and earth blackbody emissions are high one can check system performance just by pointing at cold sky and then pointing at 290 degree Kelvin earth and seeing the difference. If you have a noticeable increase in noise pointing at the bare earth or a building, you have a good system. Using the earth is easier than trying to calibrate on the sun which is very hot and variable from hour to hour. The moon is a small (less than 0.5 degree beam width) source in a cold sky and unless your beam width is small, you won't have a good source to check against. Thanks Dick. Certificates were awarded to Steve, NJ6J and Bob, W6SYA for the reception of the SBMS Heaps Pk 2 Ghz beacon message. SBMS received a \$368.82 check from the Inland Empire Council of Amateur Radio Organizations for participating in the ARRL SW Division Conference. Visitors to the convention hospitality suite received a copy of the October SBMS newsletter. 46 visitor newsletters were sent out and two visitors came to the October SBMS meeting. Welcome to new member Bob Spence, KF6KVR of Chino Hills, and to visitor Dan Breig, KM6PO of Yorba Linda. The members voted to reimburse Dave, K6OW for the cost of the hospitality suite. It was proposed that someone take charge of the location of a restaurant for the annual February SBMS dinner. No one volunteered, so next month someone will be "volunteered". Ed, K6ODV will check with the American Legion about the use of the hall for the 1 January meeting or whether to slide the meeting to 8 January.

It was suggested that there be another home to home QSO event in March or April. Ed, K6ODV collected a list of people interested in purchasing a 2 ft disk for 24 Ghz from the Antenna Center in Calumet, Michigan for around \$40. 27 people present.

Elmers- It was proposed that SBMS members pickup newer members and visitors to "elmer" them on to the air in the near future. As noted in last months newsletter Ken Halford, WB6DTA has set up elmer operations at his Burbank house on the 3rd Wednesday of the month. This meeting Joe WA6PAZ is setting the last Saturday of the month following the TRW swap meet to have trouble-shooting, calibrating and optimizing amateur microwave radios. Others willing to assist microwavers were Dave, K6OW in Moreno Valley; Dick, WB6DNX in Brea; Al, K6LJM (ATV) in Running Springs; Dick, K6HIJ in Barstow; Chuck, WA6EXV in Ridgecrest; and Bill, WA6QYR in Ridgecrest. Joe, WA6PAZ will act as the "whip" of the Elmer operations group. Elmers are to be further defining their support at the November meeting.

Ken Halford, WB6DTA elmer group meets 3rd wed of the month 6:00 to 10:00 p.m. at 2901 Joaquin Burbank, CA 91504 818-848-9059. See map.

Joe WA6PAZ elmer group meets the last Saturday of each month following the TRW swap meet at 13909 Fidler in Bellflower CA. Phone 714-704-7937 or 310 867-3294 to confirm intentions a couple of days in advance. Directions to Joe's is exit the 105 Freeway at Bellflower Blvd. Go south to Rosecrans Ave. Turn right (west) on Fidler and head north to 13909.

Scheduling

4 Dec. George, K6MBL Digital Tuning of Magnetrons

January tech talk TBD

17-19 Jan ARRL VHF Sweepstakes (microwavers can play too.)

5 Feb. tech talk TBD

February annual SBMS dinner

5 Mar. tech talk TBD

x Mar The George QTH-QTH QSO event

9 May ARRL 2304 Mhz Spring Sprint

13-15 Jun. ARRL VHF QSO Party

27-28 Jun. ARRL Field Day

1-2 Aug. ARRL UHF Contest

15-16 Aug. ARRL 10 Ghz and Up Contest 1st half

12-14 Sep ARRL VHF QSO Party

19-20 Sep ARRL 10 Ghz and Up Contest 2nd half

"Wants and Gots for sale"

Need HP8411a Harmonic Converter Dick K6HIJ 760-253-2477.

Want 10 Ghz TWT amp Doug K6JEY 562-424-3737.

Want schematic Heathkit IO-4530 scope Bill WA6QYR 760-375-8566.

Give-away Model 15 or older Teletype before going to recycler 15 Nov. Bill WA6QYR 760-375-8566.

For Sale Heathkit HW-100 with manual & ps \$200 Bill WA6QYR 760-375-8566.

More from the 1997 ARRL 10 Ghz and Up Contest....

The Following Bay Area stations operated during the 1997 ARRL 10 Ghz contest in Northern California:

X-Band 10368 Summary only: W6ASL, W6BY, W6CCY, WB6CNI, W0EOM, K6GZA, K2IYQ,

AA6IW, WA6KLK, K6KLY, KF6KVG, W7LVO, W6RXQ, N5XSA.

BEST DISTANCE WAS K6GZA @ 770 Km.

Following are the additions for 24 Ghz and 47 Ghz compiled by Bryan Yee, W6BY:

24.192: W6BY, WB6CNI, W0EOM, AA6IW, KF6KVG

BEST DISTANCE WAS AA6IW and W0EOM working WB6CNI AT MT. ST. HELENA for 147.96 Km.

47 Ghz: W0EOM and KF6KVG BEST DISTANCE 4.624 Km. 73...jim W6ASL

Hi all, finally shipping off the log! Had a really good time doing the middle of the San Joaquin Valley.. This contest was backwards from all the previous years I have been on- the fewest contacts are usually made on the last Sunday, and the most on the first Saturday. Not this year! The last Sunday was VERY busy!. Thanks to all who came out to work me roving in the valley. I made over 24,000 points JUST on the last Sunday because you came out! Worked Jack (N6XQ) at his house in San Diego from 14 of 15 stops. Missed only the one where his rig was sleeping.. Really a bit unusual to have reliable 10 GHz communications between ground stations in San Diego and Fresno!- None of the places I stopped were over 500 ft above the valley, and that was only the first stop. All the rest of the stops were 150 ft high or less, and most were just stop alongside the road and point the dish!- work a dozen stations in 3 major directions from the middle of a dairy farm? With an AVERAGE distance of 350 km? on X Band? Naaah!

The AVERAGE contact distance from each of the 15 stops I made on the second weekend was 346 km, varying from 309 to 394 km. I am pretty happy with 108 QSOs from 15 stops with an average distance of 346 km, a minimum of 195 km, and a maximum of 565 km. Not too shabby for an X-band "mobile"! Wait until next year when El Nino is gone and BOTH weekends have good inversions! 73, all robin, wa6cdr

Hello fellow microwavers, I had a ball operating from the house this year. I can't understand why

I am not as tired as I normally am at the end of a contest. It sure was nice watching the football games and operating the contest at the same time. The 6 footer and 15 watt TWT enabled me to at last get into the bay area from the home QTH. I worked Ron, k6gza from each of the 4 bay area mountain tops he operated from. The best DX was Ron operating from Mt. Vaca at 768 km. His signal was also stronger from Vaca than from the other 3 locations. Thanks for the excitement Ron. I was really surprised when I tallied up the score to discover that I had worked 14 unique grid squares. dm03, dm04, dm05, dm06, dm12, dm13, dm14, dm15, cm94, cm95, cm96, cm97, cm87, and cm88. Many of these were from Robin, WA6CDR roving around the San Joaquin valley. Thanks Robin. The finals were 65 Q's, 25 unique callsigns, 19,522 points. Maybe next year we will be back to Mexico. Adios Jack n6xq@ham-radio.com 94 countries on 50 Mhz To see me and others of the San Bernardino Microwave Society (SBMS), Check out <http://www.ham-radio.com/sbms>

Ed, W6OYJ reports having ended up with 72 QSO's on 10 Ghz and 14 on 24 Ghz. Best DX on 10 Ghz was WA6CDR, Robin (CM96) from Point Loma (DM12) at 476 Km and on 24 Ghz was 133 km from Mojave (DM05) to the guys on Heaps Pk (DM14) WA6QYR, WB6DNX, N6CA, K6OW.

Bill, WA6QYR had 81 QSO's on 10 Ghz with 473 km best DX to Robin in CM96 from DM14. Best DX on 24 Ghz was 133 km to W6OYJ in DM05 from DM14 and 5 QSO's.

Chuck, WA6EXV had a total of 102 QSO's. 10 Ghz best DX was 390 km and 129 km on 24 GHz.

Jim, W6ASL reports his "best/worst" activity during the contest was "tuning" K6GZA's 4 ft dish. I ran over it with the front right tire on my vehicle while attempting to shine the headlights on his equipment while packing up in the dark on Mt. Tam. His best distance was the next day when Ron worked Jack in San Diego from Mt. Vaca. Ron says he would like to "tune" my dish next year.

Pacificon '97 in Concord, CA had three forums presented by The 50 Mhz and Up Group of Northern California on Saturday October 18: "Microwaves from the year 1950 to 2000" by Will Jensby, W0EOM; "Laser Communications" by Jim Moss, N9JIM; "Low Noise Amplifier Design" by Jeffery Pawlan, WA6KBL. The web page for The 50 Mhz and Up Group is <http://www.nitehawk.com/rasmit/50UP.html>. Note the UP is in caps. Thanks Jim

10 GHz EME 9/29/97

On Sunday I made my first 10 GHz EME QSO with WA7CJO. I have to make lot of improvements of my system, both on RX and TX side. NF measured at the feed horn is about 1.6-1.7 dB and Pout 43 dBm. At present I am using linear polarization chaparral feed horn. My signals are too weak compare to what I expected, but this is only beginning. I borrowed TWTA (and repaired power supply) from Bill W4TJ, which I will have to return after the ARRL EME Contest. I have to find TWT for my self. I repaired power supply for my own TWTA, but the tube is gone. Vy 73 Paul W6/SM0PYP "Paul Chominski" <paul_chominski@wireless.adc.com> thanks W6OYJ

Gunnplexer Cookbook

Hi Larry, I'm posting this back to SBMS-net in case others need the info. I purchased this book many years ago, so here is the publisher info: Ham radio Publishing Group, Greenville, NH 03048 (don't know if still in business); Lib. of Congress # 81-80617, copyright 1981 Robert M. Richardson, Richcraft Engineering Ltd., drawer 1065, Chautauqua, NY 14722. Hope this helps. I head off to AMSAT Symposium and 97 Microwave Update this Wed. Any SBMS going to either? 73, Ed, AL7EB (ex K8MWA)al7eb@amsat.org

"Edward R. Cole" <ercolepp@corecom.net>

Following a talk on antennas and feedlines at a Cerro Coso College amateur radio license class, Bill WA6QYR presented a slide show on SBMS microwave activities to encourage the future No Code Techs to move up to microwaves and have fun.

The Western States Weak Signal Society will be having their next conferences in the following areas: 1998 San Francisco by the 50 Mhz and Up Group (N9JIM); 1999 Arizona (NU8I); 2000 San Diego (N8EWU). New WSWSS officers are President Larry Hogue, WB5OMF; VP Tim Marek, K7XC; Sec Marcia Bruno, N6ISW; and Treasurer Wes Printz, W3SE.

73's Bill